

DRAFT

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

Item 4 I. D. #5061

RESOLUTION G-3383

December 15, 2005

R E S O L U T I O N

Resolution G-3383. The California Energy Commission (CEC) requests approval of its 2006 program plan and funding request for the Natural Gas Public Interest Research Program. The CEC's request is approved.

Pursuant to California Public Utilities Commission Decision (D.) 04-08-010.

SUMMARY

This Resolution approves the California Energy Commission (CEC) report, *Program Plan and Funding Request for 2006, Natural Gas Public Interest Research Program*. That program was established pursuant to D. 04-08-010. The CEC filed this plan and the funding request on August 31, 2005.

BACKGROUND

D. 04-08-010 (the "Decision") implemented Assembly Bill (AB) 1002, establishing a natural gas surcharge to fund gas public purpose programs, including public interest research and development (R&D).

The CPUC instituted Rulemaking 02-10-001 to implement AB 1002. In this proceeding the Commission addressed various issues related to the design and implementation of a surcharge to fund gas public purpose programs.

D. 04-08-010 established certain criteria for gas R&D projects to be approved under this program.

The Decision defines public interest gas R&D activities as those which “are directed towards developing science or technology, 1) the benefits of which [sic] accrue to California citizens and 2) are not adequately addressed by competitive or regulated entities.” (p.25)*.

The CPUC established the following criteria for public interest gas R&D projects:

- 1) Focus on energy efficiency, renewable technologies, conservation and environmental issues
- 2) Support State Energy policy
- 3) Offer a reasonable probability of providing benefits to the general public, and
- 4) Consider opportunities for collaboration and co-funding opportunities with other entities.

D. 04-08-010 designated the CEC as administrator of the R&D program, because the CEC already administers the Public Interest Energy Research (PIER) program and it is publicly accountable, being subject to the Bagley-Keene Open Meeting Act and the Public Records Act.

Projects will be selected by the CEC, and reviewed and approved by the CPUC.

D. 04-08-010 reserved ultimate oversight for the CPUC. The CPUC is responsible for adopting the R&D program, and for setting the surcharge to fund the R&D program. The Decision therefore made it clear that the CPUC has final responsibility to “approve and resolve administration, funding, project approval, or other matters, and make a final decision” (p.32). The Decision further designated the CPUC’s Energy Division to serve as this Commission’s advisor (*ibid.*).

D. 04-08-010 established a zero-based budget of up to \$15 million for the Gas R&D program for 2006 (p.47). In its role as the administrator of the gas public

* See http://www.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/39314.PDF

purpose R&D programs, the CEC issued a request for project abstracts and selected program research areas. In its funding request, the CEC has also submitted a proposed budget.

The CEC timely submitted its Program Plan and Funding Request for 2005 on October 29, 2004, which the Commission approved in Resolution G-3371.

The CEC timely submitted its Program Plan and Funding Request for 2006 on August 31, 2005. In addition to providing its research plan and budget for 2006, the CEC also provides information on 2005 program activities and expenditures.

DISCUSSION

Consistent with D. 04-08-010, the CEC's Public Interest Natural Gas Research Program comprises a research and development effort directed towards maximizing efficiency and mitigating environmental effects of gas consumption. The CEC proposes to allocate its \$15 million budget to administration and a set of six ranked Program Research Areas (up from four last year), in descending order: Gas Efficiency, Environmental, Transportation, Renewables, Strategic Analysis, and Advanced Generation, in addition to a Small Grant Program. These areas and the CEC's proposed budget allocation are delineated in the appended table, *Table ES1: 2006 Research Program and Funding Request Summary*, taken from the CEC report (p.vi).

One of the two new research areas that has been added, Transportation, is the direct result of legislation, Senate Bill (SB) 76. That bill requires the CEC to plan half of the gas research budget with the California Air Resources Board (ARB), with up to one third of the funds being available for transportation energy-related research projects. SB76 does not take effect until January 1, 2006, so ARB has not yet taken an active role in the Public Interest Natural Gas Research Program. The \$3 million CEC has budgeted for this research area is a placeholder number, and specific projects have not been selected, since ARB has not yet begun its official participation.

With ARB's participation in the Program, additional funding may be requested to be reallocated towards transportation research. An amended budget summary may be submitted to CPUC during the first quarter of 2006, reflecting revised priorities.

The Small Grant Program is intended to fund concept feasibility research across all 2006 subject areas. The maximum grant award under this program will be \$85,000.

The CEC's proposed program budget and funding request should be approved. In accordance with D. 04-08-010, the annual proposed R&D program for 2006 was provided by the CEC to the Energy Division by August 31. The CEC has furthermore solicited R&D project proposal abstracts and incorporated them into the development of its plan. The Energy Division has reviewed the CEC report and found it to be submitted properly in compliance with D. 04-08-010. The basic program areas meet the criteria for public interest gas R&D projects laid out in the Decision, the CEC reasonably selected gas R&D program areas, and the CEC reasonably allocated the program's budget to the different program areas.

COMMENTS

Public Utilities Code Section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties.

The 30-day comment period for the draft of this resolution was neither waived or reduced. Accordingly, the draft resolution was mailed to parties for comments.

FINDINGS

1. The CEC filed its 2006 public interest gas R&D report on August 31, 2005, as per D. 04-08-010, and has met its obligation.
2. The CEC's proposed R&D project areas meet the criteria set forth in D. 04-08-010.
3. The CEC reasonably selected gas R&D project areas, and reasonably allocated the 2006 R&D budget to the different project areas.
4. The CEC's report, *Program Plan and Funding Request for 2006, Natural Gas Public Interest Research Program*, should be adopted.

THEREFORE IT IS ORDERED THAT:

The 2006 public interest gas R&D plan submitted by the CEC in its report, *Program Plan and Funding Request for 2006, Natural Gas Public Interest Research Program*, is approved.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on December 15, 2005; the following Commissioners voting favorably thereon:

STEVE LARSON
Executive Director

Natural Gas Public Interest Research Program 2006/DRE

Appendix -- Table ES1: 2006 Research Program and Funding Request Summary

Ranked Program Research Area – with Research Initiatives	Description of Program Area	Budget Allocation Per Research Subject Area
1. Gas Efficiency – <ul style="list-style-type: none"> Gas water heating technology Gas space heating technology Commercial food service technology Industrial combustion efficiency Industrial waste heat recovery Gas appliance technology Gas space cooling technology Systems optimization research and planning 	This area focuses on improving the efficiency of gas consuming equipment in the residential, commercial and industrial sectors	\$3.0 million
2. Environmental <ul style="list-style-type: none"> Air quality impacts and mitigation strategies for combustion of alternative gas supplies (e.g. off-spec and LNG) Climate change adaptation and mitigation-- issues and implications for the natural gas system 	This research will improve analytical capability for assessing potential criteria air pollutant (indoor and regional) and greenhouse gas impacts and mitigation strategies for traditional and non-traditional NG blends.	\$2.75 million
3. Transportation	Research initiatives to be developed 1st quarter, '06.	\$3.0 million
4. Renewables <ul style="list-style-type: none"> Water heating alternatives Process heating alternatives Renewable natural gas fuel replacements 	This area focuses on developing and commercializing alternative fuel sources, particularly solar energy and biofuels.	\$1.5 million
5. Strategic Analyses <ul style="list-style-type: none"> Tool and model development to aid in targeting appropriate infrastructure improvements Economic research to address State gas energy policy issues Security related to catastrophic events 	This research address topics such as value of increased gas storage; impact on gas prices and reliability of various fuel specifications, including off-spec and LNG; market analysis, identifying real time slack capacity needed in pipelines and mitigating impact of catastrophic events (e.g., earthquakes and terrorism).	\$1.5 million
6. Advanced Generation <ul style="list-style-type: none"> Combined cooling, heating and power (CCHP) Natural gas reformers for fuel cells, turbines, and reciprocating engines 	This research will improve the efficiency and reduce the emissions from natural gas used in commercial and industrial electricity generation, process heating and cooling.	\$0.75 million
Small Grant Program	Concept feasibility research across all '06 subject areas.	\$1.0 million
Administration	Includes planning, project selection, contracting, project management and reporting	\$1.5 million
Total		\$15.0 million

